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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/724,318 | 11/28/2000 | Ali Yahiaoui | KCC-14,851 | 6484 |

35844 7590 05/20/2003

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| EXAMINER |
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MCKANE, ELIZABETH L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1744

DATE MAILED: 05/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/724,318

Applicant(s)

YAHIAOUI ET AL.

Examiner

Leigh McKane

Art Unit

1744

-- Th MAILING DATE of this communication app ars on th cov r she t with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-37 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8, 12, 13, 19-21, 28, and 32-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Boney et al (U.S. Patent No. 5,932,495).

Boney et al teaches nonwoven substrates (col.2, line 26) for use as disposable diapers and training pants, sanitary napkins and tampons, incontinence products, and medical dressings (see Abstract). As these products come in contact with body fluids such as urine, they inherently are in contact with an aqueous source of bacteria. Boney et al further discloses treating the synthetic polymers or chitosan, from which the nonwoven substrates are made, with a surfactant such as an alkyl polyglycoside. See col.2, lines 12-13. The nonwoven substrates may be a spunbonded, a meltblown, or a carded web (col.2, lines 26-32). The nonwoven substrate may also comprise biconstituent fibers (col.3, lines 41-43).

3. Claims 8-12, 14, 15, 17-21, 28-32, and 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Yahiaoui et al (WO 98/09662).

Yahiaoui et al teaches nonwoven substrates for use as disposable diapers and training pants, sanitary napkins and tampons, incontinence products, and medical dressings. See page 3, lines 11-15. As these products come in contact with body fluids such as urine, they inherently are in contact with an aqueous source of bacteria. Yahiaoui et al further discloses treating the nonwoven substrates with a C₈₋₁₀ alkyl polyglycoside (page 3, line 27) in an amount of about

Art Unit: 1744

0.2% to about 5%. See page 15, lines 25-28. The nonwoven substrates may be a spunbonded, a meltblown, a carded, or a coformed (biconstituent) web. See page 3, lines 17-18.

Yahiaoui et al further evidences that the nonwoven substrate may be used as a liner (as in Figure 2) or it may be part of a multi-layer laminate (page 13, lines 18-30). Moreover, the nonwoven substrate may be a distribution or retention layer. See page 24, lines 2-3.

4. Claims 8, 12, 14-16, 19-21, 28, 32, and 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Stokes et al (U.S. Patent no. 5,931,823).

Stokes et al teaches nonwoven substrates (col.2, lines 45-46) for use as disposable diapers and training pants, feminine hygiene products, and incontinence products. See col.2, lines 50-53. As these products come in contact with body fluids such as urine, they inherently are in contact with an aqueous source of bacteria. Stokes et al further discloses treating the synthetic polymers, from which the nonwoven substrates are made, with a C₈₋₁₀ alkyl polyglycoside. See col.10, lines 61-63. The nonwoven substrates may be a spunbonded (col.3, line 43), a meltblown (col.3, line 61), a carded (col.4, line 60), or a biconstituent web (col.3, line 43). The substrate itself may be used as a liner, a surge layer, a retention layer (col.8, line 58 to col.9, line 23), or a laminate (col.7, lines 63-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1744

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boney et al in view of Syverson (U.S. Patent no. 5,612,045).

Boney et al teaches treating nonwoven substrates (col.2, line 26) for use as disposable diapers and training pants, sanitary napkins and tampons, incontinence products, and medical dressings (see Abstract) with an alkyl polyglycoside surfactant solution in an amount of 0.5 and 1% by weight (Examples 5A and 6). Boney et al discloses that odors containing bacterial derived components are problematic in these disposable personal products. See col.1, lines 45-47. However, Boney et al does not teach reducing the bacterial growth.

Art Unit: 1744

Syverson teaches that it was known in the art to treat feminine hygiene products, diapers, incontinence products, and medical bandages (col.3, lines 47) with antimicrobials. See col.5, lines 19-27). As antimicrobials will reduce bacterial growth in the products and thus, will reduce odors associated with the bacteria, it would have been obvious to one of ordinary skill in the art to reduce bacterial growth in the products of Boney et al.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boney et al.

Although Boney et al does not specifically teach that the nonwoven solid is a liner material, the specific products disclosed by Boney et al (e.g. diaper, sanitary napkins, incontinence products) have a liner layer. Thus, it would have been obvious to one of ordinary skill in the art to treat the liner layer with the alkyl polyglycoside solution of Boney et al since the liner layer is the first layer to come in contact with the body fluid and is in contact with skin and thus, will be susceptible to odors.

10. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahiaoui et al.

Although Yahiaoui et al does not disclose specific use of the nonwoven fabric as a medical gown, cap, glove, drape, or face mask, or as industrial workwear, Yahiaoui et al does teach that nonwovens are known to be used in health care items and industrial products. See page 1; lines 10-15. Yahiaoui et al further evidences use of nonwoven materials for filtration and protective garments in medical and industrial uses (page 2, lines 5-8). Yahiaoui et al indicates that any nonwoven being used in an application where improved wicking and distribution is desired would benefit from treatment with the alkyl polyglycoside solution. Therefore, one would

Art Unit: 1744

have found it obvious to use the treated nonwoven of Yahiaoui et al in a variety of medical and industrial uses.

Allowable Subject Matter

11. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: In the invention of Boney et al, the alkyl polyglycoside is added to the melt or to chitosan before the nonwoven webs are formed. See col.2, lines 11-14 and Examples 5A and 6. Thus, there is no teaching or suggestion of spraying, printing, or foaming the alkyl polyglycoside solution onto the nonwoven substrate.

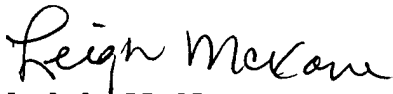
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 703-305-3387. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Art Unit: 1744

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Leigh McKane
Primary Examiner
Art Unit 1744

elm
May 19, 2003